



CLASS VIII - NOVEMBER MONTH NOTES

CHAPTER - 10 INTRODUCTION TO JAVASCRIPT

A. Tick (✓) the correct option.

1. The core purpose of this programming language has been embedded in web browsers like:  
(c) Both (a) and (b)
2. Some features of JavaScript are:  
(c) Both (a) and (b)
3. \_\_\_\_\_ is the most common form of the language.  
(a) Client-side JavaScript
4. \_\_\_\_\_ is an extended version of JavaScript that allows back-end access to databases, file systems, and servers.  
(b) Server-side JavaScript
5. \_\_\_\_\_ are the basic units of a JavaScript program.  
(a) Statements
6. Client-side JavaScript does not support:  
(c) Both (a) and (b)

B. Fill in the blanks.

1. The current name of JavaScript was given by net-scape programmer.
2. JavaScript is one of the most popular scripting languages and has many handy features for web development.
3. In the client server architecture, when the client computer sends a data request to the server through the Internet, the server accepts the requested process and sends the requested data packets to the client.
4. The Client-side script should be included or ascribed by an HTML document so that the code can be interpreted by the navigator.
5. Server side JavaScript is JavaScript code that runs on a server's local resources.
6. Simple declarations in JavaScript are often followed by a semicolon.

C. Write 'T' for true and 'F' for false for the following statements.

1. JavaScript is a static computer programming language. F
2. Initially, JavaScript was known as Live Script. T

3. Netscape handed over JavaScript to ECMA International standards organisation in 1996. **T**
4. Client-side JavaScript is the lesser-known form of the language. **F**
5. The main disadvantage of server-side scripting is the ability to heavily customize the response based on user needs, access rights, or queries on data stores. **F**
6. The client-server model is a distributed application structure that distributes the task or workload between providers of a resource or service, called servers, and requesters of the service called clients. **T**

#### **D. Short answer questions.**

##### **1. What is JavaScript?**

JavaScript is a computer programming language that is dynamic, It occupies comparatively less space and is hence lightweight.

##### **2. When was the first version of HTML designed?**

The first version of HTML designed by Tim Berners-Lee from 1989 to 1991, was relatively static and the web pages only displayed content in a static form.

##### **3. What are the reasons for the popularity of JavaScript?**

Java as a programming language was quite popular in the software industry. This popularity built the idea in Andresen's mind that all the Java bandwagon devotees would be attracted to know more and use the new language if it had the name Java.

##### **4. Why we cannot treat JavaScript as a full programming language?**

- Client -side JavaScript does not support reading or writing files. This has been kept for security reasons.
- JavaScript cannot be used for network applications because there is no such support.
- JavaScript does not have multi-threaded or multi-processor capabilities.

##### **5. What are statements in JavaScript?**

Programming instructions written in a program in a programming language are called statements. JavaScript statements are made up of values, operators, expressions, keywords, and comments.

#### **E. Long answer questions.**

##### **1. Discuss the history of JavaScript?**

##### **2. What are the features of JavaScript? explain in brief.**

- Its ability to be used in all aspects of web development such as front-end and back-end. This versatility makes it possible to create a web application using exclusively java script.
- Its nature as a scripting language makes its syntax easy to understand. Moreover, no special configuration is required to run it, as it runs automatically on the browser.
- The first two points create strong community support. A large community ensures that there are many open-source libraries available for free use. As the number of open -

source public libraries was added, the number of users also boomed, which added community support.

### 3. Discuss the main advantages of using JavaScript.

- Less Interaction with the server: You can validate user input before submitting the page to the server. This saves server traffic, which means less load on your server.
- Immediate feedback for Visitors: The user doesn't have to wait for the page to reload to see if they forgot to enter something.
- Greater Interactivity: You can create interfaces that react when the user hovers over them with the mouse or activates them via the keyboard.
- Richer Interfaces: You can use JavaScript to include things like components and drag and drop sliders to give your site visitors a rich interface.

### 4. Discuss comments in JavaScript.

- Any text between `//` and the end of a line is treated as a comment and is ignored by JavaScript.
- Any text between the characters `/*` and `*/` is treated as a comment. This can span multiple lines.
- JavaScript also recognizes the opening HTML comment sequence `<!--`
- JavaScript treats this as a single-line comment, just like the `//` comment.
- JavaScript does not recognize the HTML comment closing sequence `-->`, so it must be written as `//-->`

For example:

```
<script language = "javascript" type = "text/javascript">
<!--
// This is a comment. It is similar to comments in C++
/*
*This is a multi-line comment in Javascript
*It is very similar to comments in Cprogramming
*/
//-->
</script>
```

### F. Write short notes on:

#### 1. Server-side javascript:

Server side javascript (SSJS) is an extended version of javascript that allows back-end access to databases, file systems and servers. Server side javascript is javascript code that runs on a server's local resources, it's like C# or Java, but the syntax is javascript based. One of the best examples of server side javascript is Node. JS.

#### 2. Client side javascript.

- Client side javascript is the most common form of the language.
- The client side script should be included or ascribed by an HTML document so that the code can be interpreted by the navigator.
- This means that a web page where the script is applied need not be static HTML, but can include programs that promote interaction with the user, control the browser in which the script is being run and dynamically create HTML content.

### **3. Client server Model.**

- The client server model is a distributed application structure that distributes the task or workload between providers of a resource or service, called servers.
- In the client server architecture, when the client computer sends a data request to the server through the Internet, the server accepts the requested process and sends a data request to the server through the internet, the server accepts the requested process and sends the requested data packets to the client.